

Hubbell IG420, 153524

User Manual: Hubbell IG420 SpikeShield 4-Plex Isolated Ground Receptacle

Model: IG420, 153524

1. PRODUCT OVERVIEW

The Hubbell IG420 SpikeShield 4-Plex Isolated Ground Receptacle is an extra heavy-duty, specification-grade electrical device designed for reliable power distribution in demanding environments. This 4-plex receptacle features four NEMA 5-20R outlets, providing 125V, 20A, 1 HP capacity. Its unique isolated ground construction ensures clean power by separating the ground contacts from the mounting strap, ideal for sensitive electronic equipment.

Key Features:

- **Isolated Ground Design:** Utilizes insulation barrier construction to isolate ground contacts from the mounting strap, with a dedicated green grounding screw for system ground buss connection.
- **Robust Construction:** Features a wrap-around, locked-on brass mounting strap for enhanced support and durability.
- **Easy Installation:** Offers both back and side-wiring capabilities, accommodating stranded or solid wire for flexible setup.
- **High-Quality Materials:** Constructed from dimensionally stable, reinforced thermoplastic polyester for impact strength, heat, and flame resistance, with an impact-resistant nylon face.
- **Clear Indication:** Amperage and voltage are clearly marked, and an isolated ground triangle on the face indicates the device type.



Figure 1: Top view of the Hubbell IG420 4-Plex Isolated Ground Receptacle, showcasing its four orange NEMA 5-20R outlets and the isolated ground triangle.

2. SAFETY INFORMATION

WARNING: Risk of electric shock or fire. Installation must be performed by a qualified electrician in accordance with all national and local electrical codes.

- Always turn off power at the circuit breaker or fuse box before installing or servicing the receptacle.
- Use appropriate personal protective equipment (PPE), such as insulated gloves and safety glasses.
- Ensure all wire connections are secure and properly insulated.
- Do not exceed the specified electrical ratings (125V, 20A).
- Verify proper grounding before restoring power.

3. INSTALLATION (SETUP)

This receptacle is designed for installation in standard electrical boxes. The isolated ground feature requires a dedicated insulated ground wire from the system ground buss.

Installation Steps:

1. **Turn Off Power:** Locate the circuit breaker or fuse controlling the circuit where the receptacle will be installed and turn it OFF. Verify power is off using a voltage tester.
2. **Prepare Wires:** Strip approximately 1/2 inch (12-15mm) of insulation from the ends of the circuit wires (hot, neutral, and ground).
3. **Connect Wires:**
 - Connect the hot (usually black or red) wire to the brass terminal screw.
 - Connect the neutral (usually white) wire to the silver terminal screw.
 - Connect the dedicated insulated ground wire to the green grounding screw on the receptacle. This screw is connected directly to the isolated ground contacts.
 - The receptacle also features back-wiring capability for easy installation.
4. **Mount Receptacle:** Carefully fold the wires into the electrical box. Align the receptacle with the mounting holes in the box and secure it using the provided mounting screws. The 0.050-inch steel-zinc coated mounting strap provides additional support.
5. **Install Wall Plate:** Attach the decorative wall plate (not included) over the receptacle.
6. **Restore Power:** Turn the power back ON at the circuit breaker or fuse box.



Figure 2: Side view of the Hubbell IG420 4-Plex Isolated Ground Receptacle, illustrating its compact profile and sturdy design for flush mounting.

4. OPERATION

Once properly installed and powered, the Hubbell IG420 4-Plex Isolated Ground Receptacle functions as a standard electrical outlet with enhanced grounding. Simply insert the plug of your electrical device into one of the four available receptacles. Ensure the device's plug is compatible with the NEMA 5-20R configuration.

The isolated ground feature helps protect sensitive electronic equipment from electrical noise and interference that can travel through the conventional grounding system.

5. MAINTENANCE

The Hubbell IG420 receptacle is designed for long-term, maintenance-free operation. However, periodic inspection is recommended:

- **Visual Inspection:** Periodically check the receptacle for any signs of physical damage, cracks, discoloration, or loose connections.
- **Cleaning:** If necessary, gently wipe the surface with a dry, soft cloth. Do not use abrasive cleaners or solvents. Ensure power is off before cleaning.
- **Tightness of Connections:** If you suspect a loose connection or experience intermittent power, turn off the power at the breaker and carefully check the wire terminal screws for tightness.

6. TROUBLESHOOTING

Most issues related to electrical receptacles are due to improper installation or circuit problems.

Common Issues and Solutions:

- **No Power to Receptacle:**
 - Check the circuit breaker or fuse for the circuit. Reset the breaker if it is tripped or replace the fuse if blown.
 - Ensure all wire connections inside the electrical box are secure. Turn off power before checking.
- **Loose Plug Fit:**
 - If plugs feel loose, the receptacle may be worn. Consider replacing the receptacle.
- **Overheating:**
 - If the receptacle feels warm to the touch, immediately unplug devices and turn off power. This could indicate an overload or a faulty connection. Consult a qualified electrician.

If troubleshooting steps do not resolve the issue, or if you are unsure about any electrical work, contact a qualified electrician.

7. SPECIFICATIONS

Attribute	Value
Model Number	IG420, 153524
NEMA Configuration	5-20R (4-Plex)

Voltage Rating	125V
Amperage Rating	20A
Horsepower Rating	1 HP
Poles/Wires	2-Pole, 3-Wire
Grounding Method	Isolated Ground
Material	Reinforced Thermoplastic Polyester, Nylon Face
Color	Orange
Mounting Strap	0.050-inches Steel-zinc coated
Dimensions (Approx.)	3 x 2 x 2 inches
Weight (Approx.)	1 Pound

8. WARRANTY AND SUPPORT

Warranty information for Hubbell products is typically provided by the manufacturer and may vary. Please refer to the official Hubbell website or contact Hubbell customer service for detailed warranty terms and conditions.

For technical support, product inquiries, or assistance with installation, please contact Hubbell customer support directly. Contact information can usually be found on the manufacturer's official website or product packaging.

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